antagonism is very weak or even not present at all, and in some cases that the two drugs seem to combine to depress the heart to a greater extent than acetanilid does when given alone. The heart rate, on the other hand, is not slowed after a mixture of acetanilid and caffein are given, as is the case when acetanilid is given alone, and the decreased heart rate following the exhibition of the former alone tends to become normal upon the subsequent injection of caffein. Caffein is further shown to increase the toxicity of acetanilid mixtures when given to the intact animal, and in certain experiments this is not only a summation effect but even some synergistic action is to be observed.

Sodium bicarbonate appears to markedly lessen the poisonous effects of acetanilid upon the heart, which is shown to be less depressed than when the alkali is not given. The lessened toxicity also appears in the experiments upon the intact animal, in which case acetanilid when given alone proved to be far more toxic than in mixtures with the alkalies.

Another interesting point demonstrated by the investigation is the increased toxicity of acetanilid by the addition of alkaloids of the morphin group. Salicylic acid and the bromides, on the other hand, appeared to have no effect one way or the other. Other experiments showed that caffein is not materially antagonistic to the circulatory depression following antipyrin, but that it prevents the slowing of the heart rate. With the intact animal the mixtures of the above drugs were invariably more poisonous than antipyrin alone. In contact, and as in the acetanilid experiments, sodium bicarbonate was somewhat antagonistic to the heart effect of antipyrin, but when given to the intact animal it did not seem to lessen the toxicity of antipyrin in any degree.

Do not forget that the question as to whether we shall continue indefinitely to defend the members of the Society in all malpractice suits MEDICAL for a merely nominal assessment DEFENSE. each year, will come before the Society at the next meeting.

Council did all that it could do in getting the machinery started and arranging to run it until next April; then the Society as a whole must pass upon the plan. In all human probability the work can be carried on for an amount not exceeding one dollar per year per member. For one dollar plus your ordinary dues to your County Society, you are sure of having any suit for malpractice that may be filed against you, defended to the limit. Does not that seem to be highly desirable—and mighty cheap? No single practising physician can say when some disgruntled patient may take it into his head to bring suit even on the most flimsy of pretexts; and even if the suit is foolish and the defendant sure of a verdict, it means to him a lot of trouble and annovance and considerable expense. This can be done in more effective fashion by the Society as a whole and can be paid for easily out of a fund secured by the special assessment of one dollar per year upon

each member. The work is already under way and two suits have thus far come to our attorney's attention, both of which will undoubtedly be successfully defended. Remember that the cause for the action must have occurred after July 1st, 1909. No suit based on an alleged malpractice which occurred before that date will be defended by the Society. Some beginning date had to be set and the Council fixed the first of July, because it was the beginning of the month next after that in which the Council decided to take up the work. Do not wait for a suit to be filed if you have any reason to think that one is pending; let us know the facts, so that the attorney may become acquainted with everything relating to it, and possibly ward off the threatened suit.

The career of Dr. Cesare Lombroso, the famous psychiatrist and criminal anthropologist who recently died at an advanced age, DR. CESARE furnishes a fertile field for thought. LOMBROSO.

Exhibiting in early years an extraordinary mental development, he

became a Professor in the University of Pavia at the age of twenty-six, and during his long life devoted largely to research, promulgated doctrines so radical that they attracted universal attention. It is possible that some future historian will classify this remarkable personality with those men of genius whose eccentricities were so carefully studied by him. His exhaustive knowledge and versatility are nowhere exhibited to better advantage than in his efforts to prove the insanity of genius. His temperament is seen everywhere in his writings, and they teem with an enthusiasm which is irresistible. As a scientist he discovered no great truths which will perpetuate his name, but the subjects with which he was so closely associated owe their development in recent years largely to his writings. Extremist though he was, and lacking that rare scientific acumen which permits of accurate discrimination, he mingled the web of fact with the woof of fancy in such an attractive fabric that it has made his books famous the world over. The opposition his radical ideas engendered built up a voluminous literature which has done much in elucidating his chosen fields. Lombroso's work was essentially that of the pioneer, and as such it must appeal strongly to every thinking man. It has remained for others to separate orderly truth from chaotic fiction. He hewed a crooked trail which those who have followed in his steps have broadened and straightened.

## ANIMAL EXPERIMENTATION.

The address of Charles W. Eliot, delivered on Ether Day at the Massachusetts General Hospital, appears in a recent issue of the Boston Medical and Surgical Journal. The ex-President of Harvard surveys the field of medicine from a mountain top and so broad and comprehensive is his horizon that his view will be of interest to every practitioner. His arguments for animal experimentation deserve a wider reading than the columns of this excellent journal afford. It is the attention of the laity which

should be sought primarily, for medical readers must be very few who are not already convinced of the justness of this cause.

Three doubts, he says, are often suggested concerning the value of animal experimentation. The first relates to whether or no biological research really contributes to the success of medical art. The second concerns the question of justification for animal experimentation when it is not known that the results, although they may be scientifically sound, can have any effect whatever on the human being. The third doubt would question the justification of experiments which might interfere with the comfort, joy or life of animals. These are the queries which the intelligent layman, who has made some attempt to solve the problem for himself, is prone to ask. With rare logic, splendid illustrations and statistics so aptly chosen that they are startling even to him who follows medical literature carefully, the writer bowls over these quandaries one after another.

At the present time the best arguments of physicians in favor of the importance of their work are given to other practitioners to assimilate. There is no reason why the medical profession should be fed so constantly on predigested food. The great body of the general public, of which the profession is but a small part, are seeking eagerly such information. The people are deeply interested in medical research and its many conquests and are especially concerned with preventive medicine and its present applications. A recent article on hookworm disease in a popular magazine has set the world thinking. It is safe to say that the average Californian knows more about pellagra than he does of the prevalence of malaria in his own state. The whole superstructure of preventive medicine depends upon the education of the individual. Is it too much to say that the rights and privileges of animal experimentation rest upon the same basis?

It is not any longer necessary to emphasize before the medical profession of this state the special
position of responsibility to the
nation that California occupies in
the matter of tropical medicine.
The importance of the subject de-

mands a recognition on the part of the whole profession of the Pacific Coast of the various so-called tropical diseases which are now present in, or may at any time invade our territory. With this fact in mind, we have asked Dr. Creighton Wellman, whose eminent qualifications and researches along these lines are well known, to prepare from time to time a critical summary of advances in knowledge in this direction as well as other matter relating to the incidence, etc., of tropical disease in this part of the country. Our idea is to make use of the Journal as a clearing-house for subjects of interest in this field.

A cordial invitation is extended to all medical men to co-operate in making this department useful. Communications, abstracts, reviews, notes, comments, news items, etc., bearing on the general problem of tropical medicine may be directed to the Editor, Dr. Jones, or to Dr. Wellman in his care.

With the object, of gaining, an idea of the amount of tropical disease in the city of Oakland, the writer has examined a number TROPICAL DISEASE of patients in its hospiIN OAKLAND. tals, clinics and dispensaries, with the result that tertian, quartan and aestivo-autumnal malaria, leprosy, amoebic dysentery and liver abscess, bubonic plague, filariasis, flagellate diarrhoea and various intestinal parasites—including flukes (Opisthorchis), tape worms (Dibothriocephalus, Taenia, Hymenologic), and round worms (Ascarie Organic)

leprosy, amoebic dysentery and liver abscess, bubonic plague, filariasis, flagellate diarrhoea and various intestinal parasites—including flukes (Opisthorchis), tape worms (Dibothriocephalus, Taenia, Hymenolepis), and round worms (Ascaris, Oxyuris, Necator, Trichocephalus, Strongyloides)—have all been seen. It is proposed to publish a fuller communication on this subject when the list is complete, but the existence of these and probably other tropical diseases is here recorded as being of interest and illustrative of the dangers of infection to which the inhabitants of the bay cities are constantly exposed.

The reports of thousands of deaths from the epidemic of Asiatic cholera now raging in European Russia furnish an instance of a

CHOLERA IN RUSSIA.

"tropical" disease invading a temperate and arctic region.

The situation begins to recall

the great European epidemics of the last century, notably those of 1829, 1847 and 1869, all of which mulcted Russia severely. The older members of the profession will remember some of the epidemics which visited the United States in 1832, 1848-53, 1866 and 1873. We may congratulate ourselves that we have districts where cholera would probably be unable to propagate itself even if introduced, but we should not forget that we possess others where the conditions make quite possible such a calamity. The moral of the whole situation is that not only Russia but every other temperate country also needs to be constantly on guard against the importation of tropical diseases and watchful of any already introduced.

Pellagra in the United States is a curious illustration of a disease long unrecognized but found to be common when once the gen-PELLAGRA. eral profession learned to diagnose it. The affection seems to be widespread, having been reported pretty much throughout the south, from New England and from the middle west. It should be carefully looked for on the Pacific Coast, as all information regarding its geographical distribution is at this time of the greatest value as having a possible bearing on the obscure actiology of the disease. As it has been reported from such diverse regions as South Africa, the Soudan, Egypt, Turkey, Italy, Poland, India, Argentina, Brazil, Mexico, New Caledonia, the West Indies and the United States, importation of cases may always be expected in addition to those which originate at home.